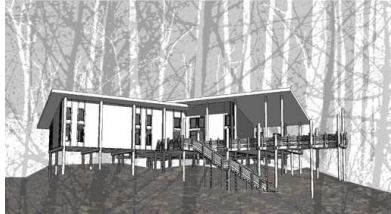
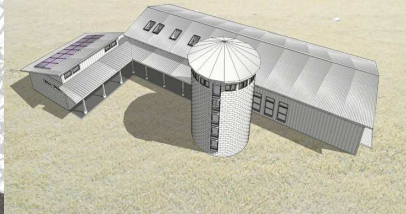




Sustainable Features of the Three Nature Centers



Beaman Park Nature Center



Bells Bend Outdoor Center



Shelby Bottoms Nature Center

All Three Nature Centers

- Registered to be EarthCraft Certified upon completion
 - Site planning
 - Energy efficient building envelope and systems
 - Energy Star Certified
 - Water conservation
 - Indoor air quality
 - Resource efficient design and building materials
 - Waste management practices during construction
- Small footprint of buildings (3175 square feet and less) with maximum use of porches & outdoor space
- Designed to minimize site impact - location of each center on the edge of the Park to minimize disturbance to the natural areas
- Interpretive Plan developed before the buildings were designed to connect the centers, exhibits and programming to the land and the individual Park
- 20-25% fly ash in concrete mix
- Natural bio-Swales for rainwater run-off
- Low flow water closets with automatic flush sensors
- Water-less urinals in public restrooms (each saves approximately 40,000 gallons of water per year)
- Limited grass areas, no irrigation and use of only native (to the site) plant materials for landscaping
- Energy star appliances and equipment – refrigerator, dishwasher, copier, etc.
- Designing building envelopes, HVAC, lighting and other systems to maximize energy performance
- Low V.O.C. paints and sealants
- Long-lasting metal roof
- Light colored roof - to keep building cooler in the summer and reduces the “heat island effect”
- Minimal site lighting with multiple controls
- Natural day lighting for all public spaces
- Ceiling fans and operable windows for natural ventilation
- Fiber Cement Siding Material
- Passive solar design
- Erosion control site plan
- Tree preservation plan
- Low E double insulation glass for all windows
- Indoor fluorescent fixtures
- Demonstration site with the Cumberland River Compact's Building Outside the Box (BOB) Program
- Buildings designed to be exhibits themselves – showcasing examples of sustainable design

Shelby Bottoms Nature Center

- Green Roof (extensive, shallow four inch growth media with drought resistant sedums)
 - Absorbs, retains, filters and stores precipitation
 - Storm water reduction (roof runoff eliminated or reduced)
 - Longer roof life (moderates temperature swings and protects roof from UV rays)
 - Energy savings (lower cooling costs in summer, lower heating costs in winter)
 - Insulating qualities will also help quiet the facility – sound insulation
 - Reduction of heat island effect
 - Improved air quality
 - Sequesters carbon dioxide
- Roof-rain water collection (Rain Chains) into rain-basins leading to bio-swale for rain treatment.
- Solar shade screens
- Center located next to existing entrance, parking lot, utilities and Shelby Park

Bells Bend Outdoor Center

- Photovoltaic cells on roof to supplement electric power
 - Energy generated will be approximately 4,400 kwh a year, which will pay for an additional 4,400 kwh a year through the NES Generation Partners program.
 - Over 25 years, 185,035 lbs of CO₂, the leading greenhouse gas will be avoided.
- Center located on old home site
- Pervious concrete walks

Beaman Park Nature Center

- Geothermal Heat Pump for HVAC
 - Energy-efficient
 - Environmentally clean
 - Cost effective
- Pervious concrete walks
- Parking designed to minimize disturbance of existing trees through staggered parking between trees
- Center located on previously logged site near a state highway and on the edge of the Park
- Logs collected from the site to be used for mantle, lumber, bowls and more

Finishes at all Three Nature Centers

Plastic Laminate by Nevamar:

- Post Industrial recycle content – 1-2%
- Regional Materials – manufacturing plant within 500 mi range

Toilet Partitions by Comtec/Capitol:

- Pre-consumer recycled HDPE solid plastic goods – 100%; post-industrial recycled HDPE – 25%-70%.

Quarry Tile by American Olean:

- Recycled Content – 8.6%
- Regional Materials – two manufacturing plants for quarry tile within 500 mi range

Bill Purcell, Mayor
Metropolitan Board of Parks and Recreation
Roy Wilson, Director

Everton Oglesby Architects
Knestrick Contractor, Inc.

For more information about the new nature centers contact Sandy Bivens with Metro Parks at the Warner Park Nature Center, 352-6299 or visit the Parks website at www.nashville.gov/parks



ADA 615-862-8400